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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,585	12/08/2003	Mark W. Stavnes	SC-5285 CON	1569
24275	7590	07/13/2004	EXAMINER	
James V. Lapacek S & C Electric Co. 6601 N. Ridge Blvd. Chicago, IL 60626			NOLAN, SANDRA M	
			ART UNIT	PAPER NUMBER
			1772	

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/729,585	STAVNES ET AL.	
	Examiner	Art Unit	
	Sandra M. Nolan	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims

1. Claims 1-3 are pending.

Rejection Maintained

2. The 35 USC 103 rejection of claims 1-3 as unpatentable over Brown et al (US 5,975,145) in view of Tobin (US 4,349,803) is maintained for reasons of record.

Response to Arguments

3. Applicant's arguments filed in the response dated 07 June 2004 have been fully considered but they are not persuasive.

The arguments presented in that response will be discussed in the order in which they were presented.

On page 3 of the 07 June 2004 response, applicants argue that the Brown reference teaches wound fuse tubes, but they contain inorganic filler, not the melamine arc-quencher of their claims.

However, the secondary reference, Tobin, teaches the use of melamine as an arc-extinguishing material (col. 4, lines 14-16) in its fuse tubes (abstract; title). Since the 35 USC 103 rejection is based upon the combination of both the Brown and Tobin teachings, it is proper to use Tobin to supply the melamine that Brown does not teach.

Also on page 3, applicants argue that the examiner is proposing the substitution of the melamine of Tobin for the filler of Brown. Note the use of the phrase "in place of" in lines 9-10 in the third full paragraph on that page.

However, the office action actually says that it is deemed obvious “to employ the melamine of Tobin as a filler in the fuse tubes of Brown in order to improve the arc-extinguishing properties of the resultant fuse tubes.” (Quoted from page 4, fourth full paragraph on page 4 of the 08 March 2004 office action.) The action does not refer to the substitution of melamine for Brown’s fillers, but to the use of melamine in Brown’s compositions.

In the second half of the third paragraph on page 3, applicants argue that the combination of Brown and Tobin is not obvious (applicants used the phrase “not suggested to those skilled in the art *to try*” [emphasis added]) because (a) the fabrication processes are different—i.e., Brown winds while Tobin molds—and (b) the properties of the arc-extinguishing materials in the references are different.

The examiner has three responses:

First of all, the examiner did not assert that it was obvious “to try” anything. The office action states that the use of Tobin’s melamine in Brown’s fuse tubes is obvious in order to give them better arc-extinction.

Secondly, the processes by which Brown and Tobin are of no consequence when, as here, the claims are to articles, i.e., fuse tubes, and not the process(es) by which they are made.

Thirdly, the properties of melamine (an organic compound) and aluminum trihydrate (an inorganic compound) would be expected to be different. For instance, the organophilic nature of melamine suggests that it would be compatible with organic binders, such as the Bisphenol A epoxy resins used by Brown, (col. 5, lines 5-11) and

applicants (applicants' claim 2), are present in the tubes. On the other hand, inorganic arc quenchers, such as aluminum trihydrate, would be expected to be more compatible with inorganic binders, such as silicates or borates.

Lastly, applicants argue, in the penultimate sentence of the third paragraph on page 3, that the Rinehart patent (US 5,015,514)—which is not involved in the current rejection—teaches that aluminum trihydrate is a novel and unobvious arc-extinguisher and is not interchangeable with melamine.

However, the rejection, as stated, does not call for the substitution of melamine for aluminum trihydrate. Also, the novelty or nonobviousness of aluminum trihydrate as an arc-extinguisher is not relevant to a discussion of the obviousness of using melamine—a known arc-extinguisher—in the Brown fuse tubes.

Final Rejection

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication should be directed to Sandra M. Nolan, whose telephone number is 571/272-1495. She can normally be reached on Monday through Thursday, from 6:30 am to 4:00 pm, Eastern Time.

If attempts to reach the examiner are unsuccessful, her supervisor, Harold Pyon, can be reached at 571/272-1498.

The fax number for patent application documents is 703/872-9306.



S. M. Nolan
Primary Examiner
Technology Center 1700

SMN/smn
10729585(20040712)